1- TITLE OF THE INVENTION : Concepts and their applications, pumps, compressors working on valves and Engines working on those compressors.

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2- CIRCUMSTANCES AND DATE OF CONCEPTION :

In 1990 - I was in Lebanon and I found the concept : if you have two sources of energy, you can create a third source that has a temperature higher than these two sources by using these two sources.
It's application is a Cycle (of heat exchangers, expansion valves, pump or compressor) by creating this cycle you can create this third source.
In 1992, in Lebanon, I found by analogy, that if you have two sources of pressure, you can create a third source higher than these two sources by using these two sources.
Its application led to the pump and compressor that works on valves and consequently the engines.

If you have 2 sources of temperature, you can have a cycle that create power and by using this power, you can have a cycle to create a third source of temperature higher or lower than the 2 sources used : by combining these 2 cycles on a shortcut between these 2 cycles. You can create the cycle that applies to the theory.

3- DESCRIPTION OF THE INVENTION :

pump : FIG. 1 – It is constituted of two cylinders, one smaller in are than the first one and a free moving piston on the small cylinder and the system is fed with water from cylinder 1 (the heavier the piston and the thicker it is, the better). These two cylinders are connected by a pipe and a valve. Subsequently, a pipe is taken out from cylinder 2 (with a valve). This pipe transmit the pumped water and the pressure.
FIG. –1- : valve 1- Open, valve 2- closed., equilibrium is reached.
valve 1- closed, valve 2- open, the water is pumped through a pipe
valve 1 open, valve 2 closed, equilibrium is reached and water is fed.
ETC…
A multistage pump leading to ultra high pressures could be constructed by having several cylinders (FIG. 2) (the second one is less in area than the first one, and the third is lesser than the second in area, etc… in order to have large amount of water fed) (and heavy pistons on cylinders, on cylinder three the piston is heavier than the piston on cylinder two, four heavier than three, etc… in order to have a larger compression from cylinder to the other).
FIG. 2 : valve 1 open, other valves closed, feeding of water
valve 2 open, other valves closed, compression or pumping
valve 3 open, other valves closed, more compression in being done
ETC… then we restart from valve 1
Which lead to tremendous pressure.
Compressor : a compressor is the same as the pump but we could put a cap on the water of last pipe (separating water from air and compressing)
a more scientific approach will be to compress a gas instead of water. We can compress other fluids than water but these gases must be heavier than air (we can not compress air by air). As we noted the fluid must be heavier than air and will be fed by gravity through cylinder 1.
A calculation of compression (head and flow) could be done (by using density of fluid, area of cylinders, weight of pistons, and section of pipe)
In fig. 1 pressure of water in the outlet pipe (water used) = weight of piston over section of pipe.

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Valves : electric valves could be used and a reversing contactor could be used between cylinders 1,2 or 2,3 or 3,4 etc... a reversing contactor is activated by a solenoid (when 1 is on, 2 is off and vice versa) with a time delay between activations (waiting for all valves to be activated. All other reversing contactors would have the same delay time)
Or we could use every electric valve apart with a time delay (the same time delay for all electric valves, of course the time delay between the on and the off and then after all valves have been activated the on again)
ENGINS : Engine 1 : blades in a cylinder activated by compressors on valves could constitute an engin. Fig. 3 the blades in the cylinder are activated by pipes all around it (these pipes could have outlets at cylinder as large as the width of the cylinder). Every two consecutive outlets are connected to a compressor that works on valves, one of the two pipes is the return to the first cylinder and the other one is the outlet (pressured) of the compressor. We must have a distance between the two pipes at cylinder larger than the distance between two blades. This creates pressure differences between blades and the blades turns. The blades could turn a shaft which generate power that could be used for everything.

Engine 2 : low suction pressure on water will separate oxygen from hydrogen. The experiment we used to do at school (a lighted match could make oxygen and hydrogen in a glass bowl a drop of water. The thunder is that lighted match that makes oxygen and hydrogen water and rain. At low pressures, the water evaporated from the sea is split into oxygen and hydrogen.
It is reversible.
So, a compressor could make such suction pressure on water and separate oxygen from hydrogen. Then, the mixed oxygen and hydrogen are compressed to lead to either oxygen or hydrogen liquifaction and the other one remains gas. Because liquifaction conditions (pressure and temperature) of oxygen differs from liquifaction conditions of hydrogen.
Then the hydrogen could be withdrawn to make the cleanest carburant that powers engines, power plants etc...
So, compressors on valves and water could make the engine of tomorrow.

- PURPOSE : we can get pumps , compressors, engines, and power plants that operate without energy consumption

- PARTS : for pumps and compressors (cylinders connected by pipes, heavy pistons, electric valves)
for engine 1 : blades in a cylinder connected to a shaft and compressors that work on valves
for engine 2 : a compressor on valves that make suction pressure and separate oxygen from hydrogen, then a compressor on valves to compress oxygen and hydrogen, then a compressor on valves to suck the liquid (either oxygen or hydrogen) and send it to a hydrogen engine

- USE : pump and compressor : we feed the first cylinder with fluid and we operate the valves, we get the pressured fluid.

Engine 1 : we operate the valves of the compressors without feeding, we get a closed circuit at each compressor and the blades turns and generate power.

Engine 2 : we operate the three compressors on valves consequently with a time delay at first of operation. Then, we turn the hydrogen engine on.

- NOVEL FEATURES : It is a new field by itself. I never heard or red or met anything like it. I am a mechanical engineer and I know that this is a new era in power.

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- ADVANTAGES : power generated without energy consumption, power without noise and without pollution.

4- TESTING RESULTS : pump and compressor : I connected a container of water to a cylinder through a valve and I have put a piston with 20 lbs on top of it in the cylinder and have taken a hose from the cylinder through a valve. I turned valve 1 on. Water rose in the cylinder. The, valve 1 off, and valve 2 on. I got a jet of water of approximately 5 meters.
Engine 1 : I took a centrifugal backward bladed fan and closed it up and connected it to four pumps on valves , every compressor to two pipes making 45 degrees with each other on the fan casing. I opened the four first valves , then I closed them and opened the second four valves . the shaft turned.
Of course, a good design should be done to make this engine and the blades should be extended to the shaft This was an experiment and not a well designed engine.
Engine 2 : if the decompression and the compression on normal compressors will lead to the seperation of oxygen and hydrogen (one liquid , one gas). It means that it will surely work on compressors on valves, Because the latest worked perfectly. The decompression and the seperation of oxygen from hydrogen is the law of the clouds and the compression follows the rules of liquifaction.

FIG. 1

Area of cylinder 2 less than area of cylinder 1

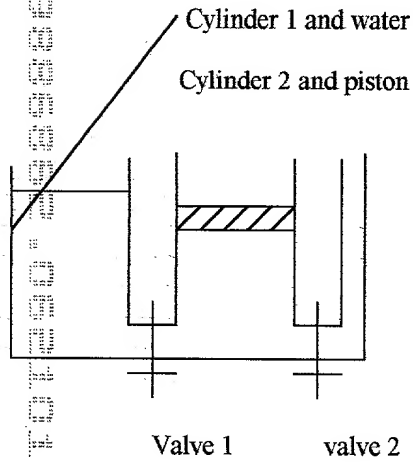
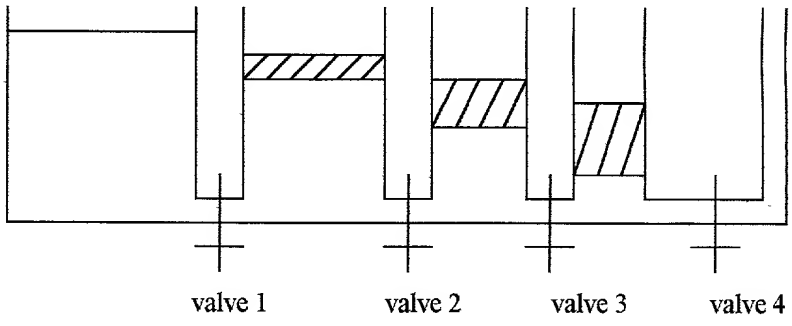


FIG. 2



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